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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,805	09/16/2003	Shinichi Handa	DAIN : 753	1118
25944	7590	12/07/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			SANTIAGO, MARICELI	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/662,805	<b>Applicant(s)</b> HANDA ET AL.	
	<b>Examiner</b> Mariceli Santiago	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 6-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 8, 2006 has been entered.

### ***Response to Amendment***

The Amendment, filed on November 8, 2006, has been entered and acknowledged by the Examiner.

Claims 1-18 are pending in the instant application.

Claims 6-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (US 5,482,896) in view of Tahon et al. (WO 99/21708 A1).

Regarding claim 1, Tang discloses a method of manufacturing a light emitting display panel, comprising laminating at least a flexible base layer (101), a first electrode layer (104), an

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EL layer (206), a second electrode layer (207) and a flexible sealing layer (208) in order, wherein the flexible base layer is attached to a rigid flat plate (102) during lamination of one or more of the first electrode layer, the EL layer, the second electrode layer and the flexible sealing layer to the flexible base layer, and the flexible base layer is removed from the rigid flat plate prior to completion of the method (Fig. 10, the sealant material 113 is introduced into the space between the ultra thin substrate 101 and the permanent support 110 to provide a moisture barrier and improve the mechanical strength of the structure, after the flexible base layer is removed from the rigid flat plate, to complete the light emitting display panel), the flexible base layer comprises a thin glass sheet (101) and a protective plastic layer (Teflon™, Column 5, lines 57-61) and has sufficient flexibility to be freely rolled and/or curved (Column 5, lines 62-67). Although Tang does not explicitly state that the base layer and the sealing layer are flexible, Tang exemplifies an ultra thin laminate comprising plastic material as a base layer and an indium-film sealing layer, and its suitability for use in curved assemblies (Column 5, lines 62-67), thus, it is considered within Tang's teaching the disclosure of a flexible base layer, due to their material and thicknesses in relation to the provisional rigid plate (102) and/or the permanent rigid substrate (110) disclosed.

Tang fails to exemplify the limitation of the flexible base layer comprises a laminate of a thin glass sheet and a preformed protective plastic sheet. However, in the same field of endeavor, Tahon discloses a method of manufacturing flexible base substrate for use in flat panel displays, such as EL displays (Page 12- lines 17-35). The flexible base substrate being obtained by laminating a glass layer and a plastic support foil (Page 3, lines 17-27) in order to provide a flexible base substrate with excellent mechanical and physical properties such as low specific weight, low brittleness, as well as high dimensional and thermal stability (Page 3, lines 3-13), that can be use in the manufacture of multiple types of flat display panels. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the

art to incorporate the laminate base substrate disclosed by Tahon in the method of Tang in order to provide a flexible base substrate having excellent mechanical and physical properties essential for the manufacture of flexible flat display panels.

Regarding claim 2, Tang discloses a method wherein the EL layer is formed on the flexible substrate (208) while the flexible substrate is attached to the rigid flat plate (102).

Regarding claim 3, Tang discloses a method wherein the flexible base layer is attached to rigid flat plate, however, Tang fails to disclose the limitation of the flexible base layer being attached to and removed from the rigid flat plate at least twice before the method is complete. However, one skilled in the art would reasonably contemplate multiple stages of attaching and subsequent removal of the flexible substrate from the rigid plate as a matter of design engineering in order to accommodate for multiple and diverse coating and/or deposition techniques of the laminated layers used during the manufacturing stages. Furthermore, applicants claimed limitation of at least two attaching and removal stages does not solve any of the stated problems or yield any unexpected result that is not within the scope of the teaching applied. Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Tang by incorporating multiple attachment and removal stages in order to accommodate for the multiple and diverse coating and/or deposition techniques of the laminated layers used during the manufacturing stages.

Regarding claim 4, Tang discloses a method wherein the flexible base layer is attached to the rigid flat plate by at least one method selected from the group consisting of a detachable sealing attachment, a bond attachment and an adhesive attachment (103, Fig. 1).

Regarding claim 5, Tang discloses a method wherein the rigid flat plate is a glass substrate (Column 3, lines 37-39).

Regarding claim 18, Tang discloses a method wherein the laminated structure comprises an insulating layer (205) that insulates the first electrode layer (104) and the second

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electrode layer (207) from each other, and the insulating layer is formed in a predetermined pattern.

### ***Response to Arguments***

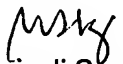
Applicant's arguments with respect to claims 1-5 and 18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mariceli Santiago  
Primary Examiner  
Art Unit 2879